

**Amendments to the Claims:** This listing of claims will replace all prior versions, and listings, of claims in the application

**Listing of Claims:**

1. (Currently Amended) A diesel (compression ignition) engine having combustion management means and an exhaust gas aftertreatment system ~~without a NO<sub>x</sub> trap~~, which system comprising a platinum group metal (PGM) catalyst liable to be poisoned by fuel sulfur to cause significant degradation of catalyst performance, which engine is fuelled, at least intermittently, by a fuel containing such levels of sulfur as to cause poisoning of the catalyst, wherein the combustion management means is effective to modulate the air/fuel ratio ( $\lambda$ ) in pulses to 0.95 or richer to provide a series of peak enrichments of from 250 milliseconds to 5 seconds in duration for an aggregate time of from 10 seconds to 10 minutes, whereby the catalyst is regenerated, and wherein the exhaust gas aftertreatment system does not include a NO<sub>x</sub> trap.
2. (Previously Presented) An engine according to claim 1, wherein the combustion management means is effective to modulate the air/fuel ratio pulses to 0.90 or richer
3. (Previously Presented) An engine according to claim 1, wherein the catalyst is an oxidation catalyst.
4. (Previously Presented) An engine according to claim 1, incorporating "common rail" fuel injection, programmed to provide in at least one cylinder, such a quantity of fuel post combustion in the main power stroke, so as to reach, in the exhaust gases,  $\lambda$  of 0.90 or richer.
5. (Previously Presented) An engine according to claim 1, wherein the catalyst is an oxidation catalyst and the exhaust gas aftertreatment system also includes a particle or soot filter downstream of the catalyst.
6. (Previously Presented) An engine according to claim 1, wherein it is fuelled with diesel fuel containing at least 250 ppm sulfur.
7. (Currently Amended) A method of regenerating a PGM catalyst poisoned by sulfur in the exhaust gas aftertreatment system of an internal combustion engine, ~~which system does~~

~~not include a NO<sub>x</sub> trap,~~ which method comprising modulating the air/fuel ratio ( $\lambda$ ) of the exhaust gases passing through the system, which system includes the catalyst but does not include a NO<sub>x</sub> trap, to 0.95 or richer to provide a series of peak enrichments of from 250 milliseconds to 5 seconds in duration for an aggregate time of from 10 seconds to 10 minutes, whereby the catalyst is regenerated.

8. (Cancelled)
9. (Previously Presented) Method according to claim 7, wherein the catalyst is in the temperature range 200-500°C, preferably 350-500°C, during regeneration.
10. (Cancelled)
11. (Previously Presented) Method according to claim 7, wherein the exhaust gas is derived from diesel fuel containing at least 250ppm sulfur.
12. (Previously Presented) A method according to claim 7, wherein  $\lambda$  in the exhaust gases is 0.90 or richer.
13. (Currently Amended) A method of regenerating a PGM catalyst poisoned by sulfur in the exhaust gas aftertreatment system of an internal combustion engine, ~~which system does not include a NO<sub>x</sub> trap,~~ the method comprising modulating the air/fuel ratio ( $\lambda$ ) of the exhaust gases passing through the system, which includes the catalyst but not a NO<sub>x</sub> trap, to 0.95 to 1.1 to provide a series of peak enrichments of from 250 milliseconds to 5 seconds in duration for an aggregate time of from 10 seconds to 10 minutes, whereby the catalyst is regenerated.
14. (Previously Presented) Method according to claim 13, wherein the catalyst is in the temperature range 200-500°C during regeneration.
15. (Previously Presented) Method according to claim 13, wherein the exhaust gas is derived from diesel fuel containing at least 250ppm sulfur.
16. (Currently Amended) A diesel (compression ignition) engine having combustion management means and an exhaust gas aftertreatment system ~~without a NO<sub>x</sub> trap,~~ which system comprising a platinum group metal (PGM) catalyst liable to be poisoned by

fuel sulfur to cause significant degradation of catalyst performance, which engine is fuelled, at least intermittently, by a fuel containing such levels of sulfur as to cause poisoning of the catalyst, wherein the combustion management means is effective to modulate the air/fuel ratio ( $\lambda$ ) in pulses to 0.95 to 1.1 to provide a series of peaks of from 250 milliseconds to 5 seconds in duration for an aggregate time of from 10 seconds to 10 minutes, whereby the catalyst is regenerated, and wherein the exhaust gas aftertreatment system does not include a NO<sub>x</sub> trap.

17. (Previously Presented) An engine according to claim 16, wherein the catalyst is an oxidation catalyst.
18. (Previously Presented) An engine according to claim 16, incorporating "common rail" fuel injection, programmed to provide in at least one cylinder, such a quantity of fuel post combustion in the main power stroke, so as to reach, in the exhaust gases, the air/fuel ratio ( $\lambda$ ) pulses.
19. (Previously Presented) An engine according to claim 16, wherein the catalyst is an oxidation catalyst and the exhaust gas aftertreatment system also includes a particle or soot filter downstream of the catalyst.
20. (Previously Presented) An engine according to claim 16, wherein it is fuelled with diesel fuel containing at least 250 ppm sulfur.
21. (Previously Presented) Method according to claim 7, wherein the catalyst is in the temperature range 350°C - 500°C during regeneration.
22. (Previously Presented) Method according to claim 13, wherein the catalyst is in the temperature range 350°C - 500°C during regeneration.